



# *Army Substance Abuse Program*

**Fort Jackson, S.C.**



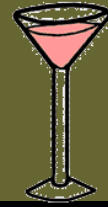
# **ARMY SUBSTANCE ABUSE PROGRAM (ASAP)**

## **Civilian Employee Prevention and Training Part Two**

**ALCOHOL**



# ***WHAT IS ALCOHOL?***



- ★ Alcohol is the **MOST ABUSED** drug in America.*
- ★ Alcohol is a colorless and pungent liquid that can be found in beverages such as wine, beer, and liquor.*
- ★ Alcohol is a Central Nervous System (CNS) depressant.*
- ★ Alcohol is considered to be a gateway drug to other drug use.*
- ★ People who drink alcohol are more prone to divorce and suicide than the rest of the population.*

**CNS DEPRESSANTS** – *Drugs that depress the overall functioning of the Central Nervous System (CNS) to induce sedation, muscle relaxation, and drowsiness\*.*

\* “Uppers, Downers, All Arounders, 3<sup>rd</sup> Edition”, CNS Productions

# ALCOHOL FACTS

- There are many factors that affect the rate of intoxication and the metabolism of alcohol. No two people process alcohol at the same rate.
- The presence of food in the stomach decreases the rate of absorption. Fasting (not eating) increases stomach emptying, thus increasing the rate of absorption.
- Alcohol mixed with water or fruit juice is absorbed slower, while alcohol mixed with a carbonated beverage is absorbed faster.

# ALCOHOL FACTS

- Body weight and composition are two other factors that effect these rates. Men tend to handle alcohol better than women do.
- This is because men are generally larger, thus have a larger blood volume, and carry less body fat.
- Body fat contains little water for the body to use in diluting alcohol.
- Men also have more of the alcohol metabolizing enzyme, alcohol dehydrogenase.

# ALCOHOL FACTS

- The situation, your mood, and why you have chosen to drink on a particular occasion effect how alcohol affects you.
- The body does develop a physical and psychological dependence to alcohol over time.
- Increased drinking increases your tolerance, requiring more alcohol to cause an affect in you.
- The type and concentration of alcohol consumed effect the rate of intoxication and metabolism.



# WHAT IS ALCOHOL?

*★A standard alcohol drink is considered to be:*

- ☒ *One 12-ounce bottle of beer/wine cooler*
- ☒ *One 5-ounce glass of wine*
- ☒ *1.5 ounces of 80-proof distilled spirits.*

*★Alcohol is also known as:*

- ☒ *Booze*
- ☒ *Juice*
- ☒ *Sauce*
- ☒ *Grog*
- ☒ *Hooch*



# ***WHAT IS BLOOD ALCOHOL CONTENT (BAC)?***

- ★ ***Blood Alcohol Content (BAC)*** - *The amount of alcohol present in a 100 milliliter (mL) volume of blood.*
- ★ ***The BAC is related to the users:***
  - ***Body Weight***
  - ***Metabolism***
  - ***Drinking Speed*** – *Someone that ‘chugs’ their drink will have a higher BAC than someone that ‘sips’ the same amount of alcohol.*

# BAC

- Blood alcohol concentration (BAC) charts are a good guideline to use in determining my level of intoxication, right? Wrong.
- BAC charts should only be used as a very general guideline. Usually, BAC charts are based only on body weight, number of drinks per hour, and a metabolism rate of 0.5 ounces per hour.
- The charts do not take into account gender differences, body composition differences, use of medication, mood changes, or your personal metabolism rate.
- Be very careful when utilizing these references and remember to take all of these factors into account.

APPROXIMATE BLOOD ALCOHOL PERCENTAGE (MALES)									
	BODY WEIGHT IN POUNDS								EFFECT ON PERSON
Drinks	100	120	140	160	180	200	220	240	
0	.00	.00	.00	.00	.00	.00	.00	.00	ONLY SAFE DRIVING LIMIT
1	.04	.03	.03	.02	.02	.02	.02	.02	IMPAIRMENT BEGINS.
2	.08	.06	.05	.05	.04	.04	.03	.03	
3	.11	.09	.08	.07	.06	.06	.05	.05	DRIVING SKILLS SIGNIFICANTLY AFFECTED. POSSIBLE CRIMINAL PENALTIES
4	.15	.12	.11	.09	.08	.08	.07	.06	
5	.19	.16	.13	.12	.11	.09	.09	.08	
6	.23	.19	.16	.14	.13	.11	.10	.09	
7	.26	.22	.19	.16	.15	.13	.12	.11	LEGALLY INTOXICATED. CRIMINAL PENALTIES IMPOSED.
8	.30	.25	.21	.19	.17	.15	.14	.13	
9	.34	.28	.24	.21	.19	.17	.15	.14	
10	.38	.31	.27	.23	.21	.19	.17	.16	

APPROXIMATE BLOOD ALCOHOL PERCENTAGE (Females)										
	BODY WEIGHT IN POUNDS									EFFECT ON PERSON
Drinks	90	100	120	140	160	180	200	220	240	
0	.00	.00	.00	.00	.00	.00	.00	.00	.00	ONLY SAFE DRIVING LIMIT
1	.05	.05	.04	.03	.03	.03	.02	.02	.02	IMPAIRMENT BEGINS.
2	.10	.09	.08	.07	.06	.05	.05	.04	.04	DRIVING SKILLS SIGNIFICANTLY AFFECTED. POSSIBLE CRIMINAL PENALTIES
3	.15	.14	.11	.10	.09	.08	.07	.06	.06	
4	.20	.18	.15	.13	.11	.10	.09	.08	.08	
5	.25	.23	.19	.16	.14	.13	.11	.10	.09	
6	.30	.27	.23	.19	.17	.15	.14	.12	.11	LEGALLY INTOXICATED. CRIMINAL PENALTIES IMPOSED.
7	.35	.32	.27	.23	.20	.18	.16	.14	.13	
8	.40	.36	.30	.26	.23	.20	.18	.17	.15	
9	.45	.41	.34	.29	.26	.23	.20	.19	.17	
10	.51	.45	.38	.32	.28	.25	.23	.21	.19	

# ***EFFECTS OF ALCOHOL AND BAC***

**.02 - .03 BAC** – No loss of coordination, slight euphoria and loss of shyness. Depressant effects are not apparent.

**.04 - .06 BAC** – Feeling of well-being, relaxation, euphoria, and lower inhibitions. Minor impairment of reasoning and memory. **.05 IS THE LEGAL LIMIT IN THE U.S. ARMY.**

**.07 - .09 BAC** – Slight impairment of balance, speech, vision, and reaction time. Judgment and self-control are reduced, caution and reason are impaired. **IN MOST STATES THE LEGAL LIMIT IS .08.**

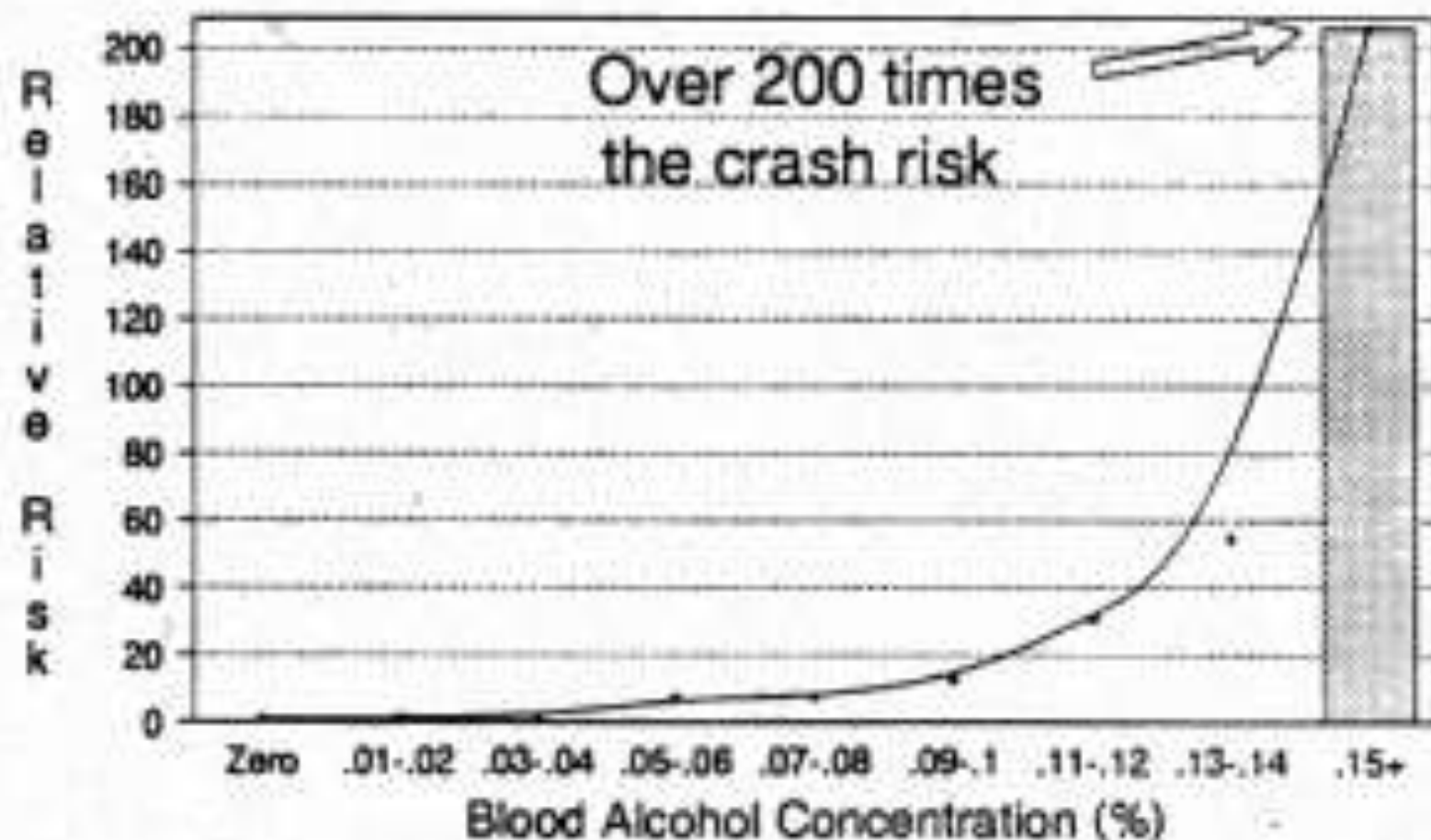
**.1 - .125 BAC** – Significant impairment of motor coordination and loss of good judgment. Speech is slurred and balance, vision, reaction time, and hearing are impaired. **IT IS ILLEGAL IN ALL STATES TO OPERATE A MOTOR VEHICLE AT THIS STAGE.**



# ***EFFECTS OF ALCOHOL AND BAC***

- .13 - .15 BAC** - Gross motor impairment and lack of physical control. Blurred vision and serious loss of balance. Euphoria is reduced and dysphoria (anxiety, restlessness) begins to appear.
- .16 - .20 BAC** – Dysphoria predominates, nausea begins to appear. The drinker appears to be a *“sloppy drunk”*.
- .25 BAC** - Needs assistance in walking; total mental confusion. Dysphoria with nausea and some vomiting.
- .30 BAC** - Loss of consciousness.
- .40 ≤ BAC** - Coma, and possible death due to respiratory arrest.

## Relative Risk of Fatal Crash As a Function of BAC





# ***IMMEDIATE PHYSICAL EFFECTS***

✦ **Slurred Speech**

✦ **Slow Reactions**

✦ **Irregular Pulse**

✦ **Blurred Vision**

✦ **Loss of Inhibitions**

✦ **Dizziness**



✦ **Staggering**

✦ **Nausea/Vomiting**

✦ **Impaired Motor Skills**

✦ **Enlarged Heart**

✦ **High Blood Pressure**

✦ **Unconsciousness**

# ***PHYSICAL SIGNS OF USE***

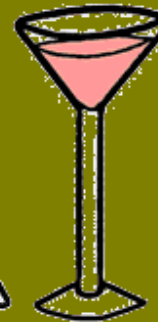
◆ **Dilated Pupils**

◆ **Nausea/Vomiting**

◆ **Dizziness**

◆ **Slow Reactions**

◆ **Irregular Pulse**



◆ **Slurred Speech**

◆ **Enlarged Heart**

◆ **Blurred Vision**

◆ **Alcohol Odor on  
Breath**

◆ **High Blood Pressure**

◆ **Unconsciousness**

◆ **Overdose/Death**

# ***ALCOHOL WITHDRAWAL***

- ***When a alcohol dependent person stops consuming alcohol they may experience withdrawal symptoms:***
  - ***Auditory Hallucinations***
  - ***Paranoid Behavior***
  - ***Body Trembles, “The Shakes”, this can occur as early as 12 hours after the last drink.***
- ***The alcohol dependent person may also show minor signs of withdrawal:***
  - ***Agitation***
  - ***Profuse Sweating***
  - ***Nausea/Vomiting***
  - ***Incoherent Speech***

# HEALTH PROBLEMS

- AIDS
- Alcoholism
- Alcohol Poisoning
- Cancer
- Depression and Suicide
- Heart Disease
- Liver Disease
- Sexually Transmitted Diseases (STDs)
- Gateway Drug?

# When someone is intoxicated:

Continually monitor the intoxicated person,  
Check their breathing, walking them often to be sure they  
are not unconscious?

A drunk person should not be put in charge of another  
drunk person.

Do not exercise the person.

Do not allow the person to drive a car, motorcycle, bicycle,  
or ATV.

Do not give the person food, liquid, medicines or drugs to  
sober them up.

Do not give the person a cold shower; the shock of the  
cold could cause unconsciousness.

Remember: **THE ONLY THING THAT CAN SOBER A  
DRUNK IS TIME**

# How to tell if someone has alcohol poisoning?

If the person is breathing less than twelve times per minute or stops breathing for periods of ten seconds or more, **CALL 911**

If the person is asleep and you are unable to wake them, **CALL 911**

Look at the person's skin. If it is cold, clammy, pale, bluish **CALL 911**

# Other Important Factors:

Stay with a person who is vomiting! Try to keep the person sitting up. If they must lie down, keep them on their side with their head turned to the side. Watch for choking; if the person begins to choke, **GET HELP IMMEDIATELY, CALL 911.**

If a person drinks alcohol in combination with **ANY OTHER DRUG, THE COMBINED EFFECT COULD BE FATAL, CALL 911.**

If the person is not in need of medical attention and is going to “sleep it off,” be sure to position the person on their side placing a pillow behind them to prevent them from rolling out of position. This is important to help prevent choking if the person should vomit. **STAY WITH THE PERSON AND WAKE THEM UP FREQUENTLY.**

IF at any time you can not wake the person up, **CALL 911.**

# Other important factors:

slowed respiration, or cool pale skin is experiencing acute alcohol intoxication or **(alcohol poisoning)**.

**This is medical emergency and you MUST get help, CALL 911.**

If unexpected delays occur, you should immediately contact their **chain of command** for additional guidance prior to your departure.



# **Binge Drinking**

**An estimated 75,000 Americans die each year because of alcohol use.**

**Binge drinking has been defined as five or more drinks per occasion, with a drink equaling 10 grams of alcohol.**

**In general, if you drink, you should only drink one drink per hour. A drink is defined as one 12 ounce beer, one 4 ounce glass of wine, one 10 ounce wine cooler or one 1 ½ ounce of 80-proof hard liquor.**

**Factors such as body weight, height and body chemistry should also be considered.**

# YOUR APPEARANCE

- If you want to have clear skin and bright eyes, don't drink alcohol.
- According to researchers, more than one or two drinks a week promote aging.
- Alcohol is considered a food with non-nutritional calories that quickly add up.
- When you abuse alcohol, you tend to be undernourished, making your hair dry, giving you cracked lips, aggravating acne, making your eyes look glassy, and giving your skin a puffy, broken vein look.

# YOUR BRAIN

- Alcohol is a depressant that slows brain activity down. While one or two drinks makes most people feel relaxed, more alcohol may cause feelings of anxiety, depression, and often aggression.
- Alcohol's first effect as it reaches the outer brain is to distort your judgment and lower you inhibition, while producing euphoria (a sense of pleasure).
- As you consume more alcohol, and it reaches the cerebellum, your coordination and perception are affected, and you can have memory blackouts.

# YOUR BRAIN

- As the alcohol reaches your mid-brain, reflexes diminish, you experience confusion, stupor, and may lapse into a coma.
- Once the alcohol finally reaches the medulla, or inner core of the brain, your heart rate drops and breathing ceases, resulting in death.
- Research suggests that continued alcohol use can cause depression.
- Alcohol robs brain cells of water and glucose, the brain's food, contributing to a hangover the next day.

# YOUR GASTROINTESTINAL TRACT

- The stomach is irritated by alcohol, causing increased stomach acid production, causing heartburn and eventually ulcers.
- Alcohol use is linked to cancer of the mouth, esophagus, stomach, and intestines.
- The liver, due to its role in breaking down alcohol, suffers the most damage.
- Alcohol use leads to destruction of liver cells, fat accumulation around the liver, and cirrhosis which is a fatal condition.
- Alcohol is also a diuretic, which causes the kidneys to increase urinary output, contributing to dehydration and your hangover.

# YOUR REPRODUCTIVE SYSTEM

- Although the research here is new, it is known that alcohol decreases the male hormone testosterone.
- Long-term can cause decreased function.
- The use of alcohol in men and women causes increased sexual desire, but decreased performance.
- Alcohol is toxic to unborn children causing permanent tissue and organ damage. This can lead to FETAL ALCOHOL SYNDROME (FAS).

# OTHER ISSUES

- Alcohol depresses the body's immune system making it easier to get sick.
- It also disrupts your sleep patterns, further depressing the immune system.
- Alcohol has been linked to an increased risk of breast cancer, high blood pressure, diabetes, kidney disease, heart disease, constipation, and strokes.

# LEGAL ISSUES

- DWI - The operation of any motor vehicle, aircraft, vessel or other means of conveyance by the operator when he/she:
  - 1) is under the influence of alcoholic beverages; or
  - 2) has a blood alcohol concentration of .08% or greater (.02% or greater for anyone under twenty- one); or
  - 3) is under the influence of narcotic drugs, central nervous system stimulants, hallucinogenic drugs or barbiturates (schedules I, II, III, IV, & V);
  - 4) is under the influence of alcoholic beverages and has fled the scene of the accident;
  - 5) is under the influence of a combination of alcohol and one or more drugs, prescription or over the counter, that contain a label warning the user not to combine it with alcohol;
  - 6) is under the influence of one or more legal drugs and has knowingly consumed quantities that substantially exceed the prescribed or recommended dosage.
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# PENALTIES

- Fine and or Prison
- Probation
- Community Service.
- Participation in a court-approved substance abuse and driver improvement program.
- Driver's license suspension.
- Additional Penalties may apply if offender had a high BAC.
- Electronic Monitoring and Ignition interlock Device.
- Court Costs, Attorney Fees, Restitution and increased Insurance Premiums may also apply.

# OTHER SANCTIONS

- **CHILD ENDANGERMENT**
- **OPEN CONTAINER**
- **IMPLIED CONSENT**
- **VEHICLE SEIZED**

# INHALANTS

# INHALANTS

- ❑ *Inhalants are breathable chemical vapors that produce mind altering effects.*
- ❑ *Inhalants are often abused because they are readily available, inexpensive, and can be found almost anywhere.*
- ❑ *There are three different types of inhalants:*
  - *Solvents*
  - *Gases*
  - *Nitrites*



# STREET NAMES



*Rush*



*Pearls*



*Snappers*



*Discorama*



*Ozone*



*Pan*



*Whippets*



*Boppers*



*Cartridges*



*Poppers*

# ***HOW ARE INHALANTS INGESTED?***

¥ ***Inhalants are ingested into the body by breathing in the vapors of the product. Several methods of inhalation are used by abusers:***



- ***Use of a bag – The bag is filled with the fumes and the user breathes air from the bag. Sometimes users will put their entire head into the bag.***
- ***Use of a rag – The rag is soaked in the product and the user presses the rag over his/her mouth and nose.***

# ***LONG TERM SIDE EFFECTS***

✧ **Memory Loss**

✧ **Emotional Instability**

✧ **Slurred Speech**

✧ **Hearing Loss**

✧ **Body Tremors**

✧ **Loss of Coordination**

✧ **Sight Disorders**



✧ **Loss of Sense of Smell**

✧ **Liver Damage**

✧ **Kidney Damage**

✧ **Bone Marrow Damage**

✧ **Paralysis**

✧ **Brain Damage**

✧ **Sudden Sniffing Death**

# ***BRAIN DAMAGE***

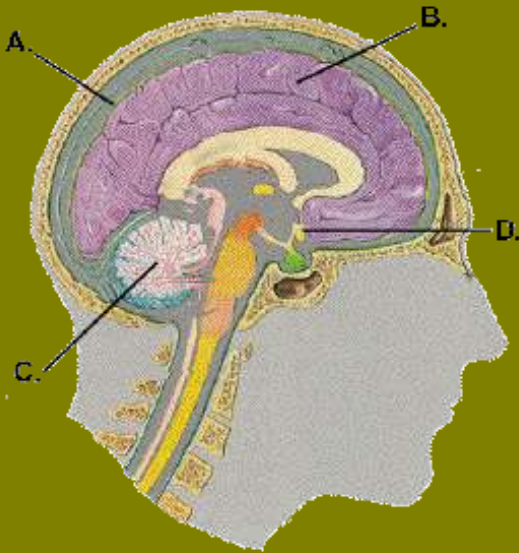
***Inhalants can cause serious damage to the brain:***

**A. Brain** – Inhalant abuse causes a variety of serious sensory and psychological disorders.

**B. Cerebral Cortex** – Inhalant abuse causes personality changes, memory loss, hallucinations, and learning disabilities.

**C. Cerebellum** – Inhalant abuse causes loss of coordination, slurred speech, chronic tremors, and uncontrollable shaking.

**D. Ophthalmic Nerve** – Inhalant abuse can cause serious sight disorders, including blindness.





# ***PRODUCTS ABUSED***

❖ **Rubber Cement**

❖ **Paint Thinner**

❖ **Toxic Markers**

❖ **Household Glue**

❖ **White - Out**

❖ **Lighter Fluid**

❖ **Spray Paint**

❖ **Hair Spray**

❖ **Fabric Protector**

❖ **Spot Remover**

❖ **Chloroform**



❖ **Degreaser**

❖ **Whippets**

❖ **Gasoline/Propane**

❖ **Octane Booster**

❖ **Nitrous Oxide**

❖ **Room Odorizers**

❖ **Helium**

# Dusting

## Dust Off



# Dusting

- "Dusting" — the term comes from the cleaning brand "Dust Off" — and it has become a teenager's new cheap and easily accessible high, despite a warning on the side of each canister.
- Dusting is the more specific term associated with the use of cans of any common aerosolized computer keyboard cleaner that contains compressed gas.

# Dusting

- The high from the gas paralyzes the user for several minutes and gives a feeling of euphoria.
- Both dusting and huffing can result in damage to the brain, lungs, heart, kidneys and liver, and can cause death.
- In computer cleaning products, a freon type of gas, or fluorinated hydrocarbon, is the dangerous ingredient.
- The dangerous practice was dramatized in the film "Thirteen." In the opening scene, the two actresses are sitting on a bed, "dusting," and then slapping each other out of their trancelike states.

# Dusting

- "Sudden sniffing death" describes the process of inhaled hydrocarbons provoking irregular heart rhythms in the victim, which leads to sudden fatal cardiac arrest in even very young and healthy hearts.
- Some retailers, like Staples and Wal-Mart, now restrict the sales of computer cleaners to buyers over 18 years of age, and many have placed warning labels on the top of cans.

# Signs of Dusting

- The warning signs of dusting are not easily detected, but these signs may indicate abuse:
- Disappearance of the product at a rapid rate
- Empty cans or containers of chemicals in trash cans
- Large stashes of a chemical product in the child's room
- Strange smells on or around a child
- Residue of the product on a child's clothing or face
- Complaints of numbness of the tongue, vocal chords or throat (frostbite from Freon Gas)
- Dazed looks or bloodshot eyes
- Headaches

# The Choking Game

**Chelsea Dunn**

**A Victim of the Choking Game**



# Choking Game

- The high-risk game is known variously as "blackout," "funky chicken," "space monkey," "flatliner," "tingling," and "suffocation roulette."
- Middle-school kids as young as 10 try it, some in groups, some alone, using belts, hands, ropes, plastic bags, or towel dispensers.
- Older teens may do it to increase sexual pleasure, and many young ones and most of the girls are seeking a non-drug high.



# Choking Game

- When they strangle themselves and then release the pressure, it creates a tingling sensation in their upper body, especially their arms and head.
- The game has apparently been around for years, and is becoming the latest craze for those looking for the ultimate high.
- It's also called the passing game, tingling game and something dreaming game. But, it's nothing to play around with.

# Choking Game

- **Some kids are taking the game to other levels.**
- **They spray huffing solution into garbage bags and have their friends tie the bags around their necks.**
- **They're getting asphyxiated, not only by whatever they're huffing, but by the lack of oxygen, by having the bag tied around the head.**

# THE WARNING SIGNS

- Red eyes, severe headaches, marks on the neck, pornographic materials and/or locked doors.
- They may use ropes, belts, ties, towels and towel dispensers, etc., or even their bare hands, causing hypoxia, a shortage of oxygen, creating a 5 to 10 second high.
- Many of the devices are knotted in unusual ways.
- Kids may try it in groups or at home. It is most dangerous when alone as there is no one available to release them after passing out. And can be played anywhere, even at school.



# *Army Substance Abuse Program*

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**Exam Part Two**

